

SUPPLEMENT

THE INSTITUTION OF PRODUCTION ENGINEERS, 10 CHESTERFIELD STREET, MAYFAIR, LONDON, W.1

SCOTLAND REGION CONFERENCE 1962

The Scotland Region of the Institution is to hold a One-Day Conference in **Glasgow** on **Thursday, 8th March, 1962**, in the **St. Enoch Station Hotel**. The Conference will deal with aspects of production engineering in Scotland, and full details will be announced in subsequent issues of the Journal Supplement.

Meantime, members are asked to note the date and reserve it in their diaries.

"PRODUCTION CONTROL AS A MEANS TO HIGHER PRODUCTIVITY"

A Conference, organised by the Willesden and Hendon Productivity Association, will be held at the Headquarters of the F.B.I., at **21 Tothill Street, Westminster, S.W.1**, on **22nd November, 1961**.

The Chairman will be **Mr. J. R. Wilkinson**, Director and General Manager of Associated Electrical Industries (Manchester) Ltd., Switchgear Division, and speakers will include **Mr. G. A. Hutcheson**, M.I.Prod.E., Managing Director, National Union of Manufacturers' Advisory Service; **Mr. F. E. Pearce**, Director of Sales, Personnel Administration Ltd.; **Mr. G. Y. Elliott**, Senior Consultant, Personnel Administration Ltd.; **Mr. R. S. Geoghegan**, M.I.Prod.E., Director, E. G. Brisch & Partners.

The admission fee is three guineas. Requests for details and reservations, together with remittance, should be sent to: **Mr. D. I. Duncan**, A.E.I. Switchgear Division, 20 Neasden Lane, Willesden, N.W.10.

THREE-YEAR DEGREE COURSE IN PRODUCTION ENGINEERING

The Department of Mechanical Engineering in the University of Nottingham announces its intention of providing a three-year degree course in production engineering. The Senior Lecturer in charge of the course is **Dr. W. B. Heginbotham**, B.Sc.(Tech.), M.Sc.(Tech.), Ph.D.(Manchester), A.M.I.Mech.E., M.I.Prod.E.

Suitable applicants will be accepted as undergraduate students in Production Engineering from the 1962-1963 session onwards, and the course will normally lead to the Honours Degree of Bachelor of Science.

Full details may be obtained from the Department at University Park, Nottingham, and those interested are advised to make early application.

The International Journal of Production Research

a new forum for production research

The advancement of production engineering is dependent on continued research and this month, The Institution of Production Engineers will publish the first issue of a new quarterly Journal:

The International Journal of Production Research

The aim of the editorial board of the new Journal is to provide an international forum for production research work, for the advancement of scientific study of all factors which influence the production process. All aspects of production research will be covered — engineering, economics, mathematics, physiology, psychology.

The Journal will be of fundamental interest to all concerned with research into production processes, industrial skills, planning, co-ordination and production policy. The contents of the first issue are listed overleaf.

the editorial board

The new Journal will be edited by Professor N. A. Dudley, Head of the Department of Engineering Production in the University of Birmingham. He will be assisted by two Associate Editors: Dr. E. N. Corlett, Senior Research Fellow in the Department of Engineering Production, University of Birmingham; and Dr. S. Eilon, Reader in Production Engineering at Imperial College, University of London; and by the following panel of Consulting Editors:

Professor R. M. Barnes, University of California.

Professor W. Daenzer, Eidgenössische Technische Hochschule, Zurich.

Professor P. L. Henderson, University of Melbourne.

Professor Knut Holt, Norwegian Institute of Technology.

Professor R. Kristensson, Kungliga Tekniska Högskolan, Stockholm.

Professor J. Loxham, College of Aeronautics, Cranfield.

Dr. T. U. Matthew, Massey-Ferguson (United Kingdom) Ltd.

Professor Milton C. Shaw, Carnegie Institute of Technology, Pittsburgh.

Professor R. Mishra, Indian Institute of Technology, Kharagpur.

Professor J. de Orbanya y Aragon, University of Barcelona.

Dr. E. Schmidt, Nestle Alimentana Co. Ste An., Switzerland.

Professor S. A. Tobias, University of Birmingham.

Professor Dr. Ing. J. Mathieu, Rhein-Westf Technische-Hochschule,
Aachen.

The Editorial Committee of the Institution is responsible for the administration of the new Journal, and correspondence relating to subscriptions and other administrative matters should be addressed to:

**The Managing Editor,
Miss M. S. C. Bremner,
International Journal of Production Research,
10 Chesterfield Street, Mayfair, London, W.1.**

Subscriptions (including postage)

Members of The Institution of Production Engineers £4 4s. 0d. p.a.
(single copies : 25s. each)
Non-members £5 5s. 0d. p.a.
(single copies : 30s. each)
For bulk orders of three subscriptions and over, there will a reduction of 10s. per subscription.
All remittances should be made payable to "The Institution of Production Engineers".

THE INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH

Vol. 1., No. 1, November, 1961

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- Two Inventory Control Models.** S. Eilon, Imperial College, London.
A Note on an Application of Linear Programming. G. Gregory, University of Melbourne.
An Electrical Analogue for Solving Transportation Problems. P. R. Hills, College of Food Technology, Weybridge.
Selective Assembly — Its Analysis and Applications. E. M. Mansoor, University of Melbourne.
Research in Machining High Strength Materials at Elevated Temperatures. W. Pentland, J. L. Wennberg and C. L. Mehl, Cornell University and Cincinnati Milling Machine Co.
A Study of the Variety of Paper Sizes in the United Kingdom (abstracted) M. H. Perwani and S. Eilon, Imperial College, London.
Estimation of Service Requirements for Production Purposes. C. Kendrick, Joseph Lucas (Electrical) Ltd., Birmingham.
Optimal Revision Periods. D. J. White, University of Birmingham.

**To: The Managing Editor,
International Journal of Production Research,
10 Chesterfield Street,
Mayfair, London, W.1.**

Please enter on my behalf.....subscriptions to The International Journal of Production Research.
I enclose remittance for....., made payable to The Institution of Production Engineers.

NAME.....
ADDRESS.....
.....
.....

COMPUTERS AND PRODUCTION CONTROL

a new report from the Institution's Research and Technical Committee

For the past two years a sub-committee of the Institution's Research and Technical Committee has been investigating the possibilities of applying computers for production control applications in the manufacturing industries. Membership of the sub-committee was not limited to production engineers, but embraced those best qualified to assist in the work, whether or not they were members of the Institution.

A report of this investigation is now published by the Institution, under the title:

"Computers and Production Control"

The contents include a description of the various types of computer; a definition of production control and how it may be applied; the use of computers in production control; the economic assessment of a computer system; the conclusions reached by the sub-committee; and illustrative case studies.

Copies of the Report may be obtained from the Publications Department of the Institution, price 7s. 6d. each (including postage and packing) using the order form below.

To: Publications Department,
Institution of Production Engineers,
10 Chesterfield Street,
Mayfair, London, W.1.

Please send me.....copies of the Report on "COMPUTERS AND PRODUCTION CONTROL",
immediately on publication. My remittance for.....is enclosed.

Please Write Clearly

NAME.....

ADDRESS.....

All remittances should be made payable to The Institution of Production Engineers.

SOUTH-EASTERN REGION GRADUATE PRIZE COMPETITION

It is announced by the S.E. Region Committee that the successful entry in the 1960-1961 Graduate Prize Competition was submitted by **Mr. B. Johnson**, who received the £25 award for his Paper on "Gun Drills and Allied Tools".

At the time of submitting the Paper, Mr. Johnson was a Tooling Engineer with Borg-Warner Ltd., Letchworth, and a member of the Luton Graduate Section. Early this year he moved to Manchester, to take up the position of Chief Planning Engineer at the Automatic Transmission Division of Gresham & Graven Ltd.

THE 1961-1962 COMPETITION

The S. E. Region Committee are again running a Competition on similar lines this year. All Graduates and Students of the S.E. Region of the Institution may enter for the Competition, and the Prize will again be £25, with a Certificate as a permanent memento. In addition, the winner and the candidates whose entries reach a certain standard will be invited (with partner) to the Regional Dinner-Dance at the Savoy Hotel, London, on 30th November, 1962, where the presentation will be made.

Papers may be submitted on any subject within the field of Production Engineering. It is hoped that candidates will describe their own experiences in any aspect of Production Engineering rather than attempt to present a theoretical "textbook" Paper. Papers should not be less than 2,000 nor more than 6,000 words in length, and although they should preferably be typewritten, Papers in the candidate's own handwriting will be accepted.

Completed Papers must be submitted by **30th December, 1961**. Full details of the Competition and application forms may be obtained from: **The Institution of Production Engineers, 10 Chesterfield Street, Mayfair, London, W.1**. Envelopes should be marked "S.E. Region Graduate Prize".

SOUTH-EASTERN REGION DINNER-DANCE

The Annual Dinner-Dance of the South-Eastern Region of the Institution will be held at the **Savoy Hotel, London**, on **Friday, 24th November, 1961**, at **7.15 p.m. for 8 p.m., until 1 a.m.**

Tickets, price £2 12s. 6d. each, may be obtained from: **Miss M. Miles, Room 342, Marconi's Wireless Telegraph Co. Ltd., Chelmsford, Essex**. Remittances should be made payable to "South-Eastern Region of the I.Prod.E."

The number of tickets is limited to 350 and all applications will be dealt with in order of receipt.

BIRMINGHAM SECTION BUFFET-DANCE

The Birmingham Section announce the Annual Buffet Dance this year will be held at the **Botanical Gardens, Edgbaston, Birmingham**, on **Saturday, 2nd December**.

Dancing will continue from 7.45 p.m. to 11.45 p.m., and the evening will be enlivened by tombola, spot prizes, etc. This is a special occasion for the Section, as the President of the Institution, Mr. Harold Burke, will be present. It is hoped to see as many friends as are able to attend from the Midlands Region.

Tickets, price 21s. each, may be obtained from the Social Secretary, **Mr. H. W. Lawton, c/o Henry W Lawton Ltd., Dudley Road East, Oldbury, Birmingham**. Telephone: **BROadwell 2541, or HILlside 1807**.

SECTION MEETINGS

Visitors' Tickets may be obtained from Section Honorary Secretaries

NOVEMBER, 1961

EAST AND WEST RIDINGS REGION

Doncaster 7.00 p.m. November 14th
Technical College, Waterdale, Doncaster.
"Synthetic Fibres used in Engineering" by Mr. Lonsdale.

Halifax and Huddersfield 7.30 p.m. November 13th
Percival Whitley College of Further Education, Francis Street, Halifax.
"Design and Development of Machine Tools" by C. A. Sparkes.

Leeds Graduate 10.00 a.m. November 4th
Works Visit to R. W. Crabtree & Sons Ltd., Water Lane, Leeds, 11.
Rendezvous: Main Entrance. Apply Honorary Secretary.

Sheffield 6.30 p.m. November 13th
Grand Hotel, Sheffield.
"Human Relations in Industry" by E. Fletcher.

Sheffield Graduate 7.00 p.m. November 20th
Practical Lecture and Visit to Earls Cement Works, Hope, Derbyshire.
"The Handling of Materials for the Manufacture of Cement" by a Representative of the Company.

EASTERN REGION

Ipswich and Colchester 7.30 p.m. November 10th
Britannia Works Canteen, Davey, Paxman & Co. Ltd., Colchester, Essex.
"Design for Packability" by J. E. Evan-Cook, J.P.
Joint Meeting with the Colchester Engineering Society.

Norwich 7.30 p.m. November 7th
The Canteen, J. Mackintosh & Sons Ltd., Norwich.
A Discussion: "I Have a Problem".

MIDLANDS REGION

Birmingham 7.00 p.m. November 15th
The James Watt Memorial Institute, Birmingham.
"Some Aspects of the Design of Machine Tools and Automation Equipment for the Future", by F. A. Lewis, Head of PERA Automation Section.

Birmingham Graduate 7.00 p.m. November 14th
The James Watt Memorial Institute, Birmingham.
"Stress Forming" by A. M. Redman.

Coventry 7.00 p.m. November 20th
Craven Arms Hotel, High Street, Coventry.
"Technique on Fine Boring" by J. R. Judkins, Heald Specialist, Alfred Herbert Ltd., Coventry.

Coventry Graduate 9.45 a.m. November 4th
Works Visit to Jaguar Cars Ltd., Brown's Lane, Coventry.
Rendezvous: The Showroom.
Numbers will be limited, Graduates only should apply to the Lecture Secretary.

Shrewsbury 7.00 p.m. for 7.30 p.m. November 10th
Dinner-Dance, Morris's Cafe, Shrewsbury.
Tickets: 25s. each. Evening Dress or Dark Lounge suits.

Wolverhampton 7.15 p.m. November 8th
Wolverhampton and Staffs. College of Technology.
"Industrial Research in Britain" by P. Spear, B.Sc.(Eng.), Grad.I.Prod.E.
Joint lecture with the Graduate Section.

Wolverhampton Graduate 2.00 p.m. November 9th
Works Visit to Talbot Stead Tube Co. Ltd., Walsall, Staffs.
Rendezvous: Talbot Stead.
No transport provided.

NORTHERN REGION

Newcastle 7.00 p.m. November 20th
Rutherford College of Technology, Northumberland Road, Newcastle upon Tyne, 1.
"Cold Metal Forging" by F. Howard.

NORTH MIDLANDS REGION

Derby 7.00 p.m. November 24th
Louis Room, St. James's Restaurant, St. James's Street, Derby.
"Training Foremen" by D. B. Beynon, Labour Manager, F. H. Lloyd & Co. Ltd.
Joint Meeting with British Institute of Management.

Leicester 7.00 p.m. November 9th
Annual Dinner.
Kings Hall, Grand Hotel, Leicester.

Leicester 7.15 p.m. November 16th
The Grand Hotel, Leicester.
"The Russian Approach to Production" by M. Seaman, M.Sc., M.I.Mech.E., -M.I.Prod.E.

Loughborough College Student Section 7.30 p.m. November 16th
Room A1, Schofield Building, Loughborough College of Technology, Leicester.
"The Design of Bluebird" by D. L. Stevens.
Illustrated by slides and a 16 mm. film.

Lincoln 7.00 p.m. November 10th
Dinner-Dance.
Moor Lodge Hotel, Branston, near Lincoln.

Lincoln 7.30 p.m. November 30th
Ruston Club, Lincoln.
"Numerically Controlled Machine Tools" by R. C. Brewer.

Nottingham 7.00 p.m. November 1st
Nottingham Reform Club, Victoria Street, Nottingham.
"Fabrications in Aircraft Gas Turbine Engines" by W. E. Corbitt.

Peterborough 7.30 p.m. November 15th
Conference Room, F. Perkins Ltd., Peterscourt, Peterborough.
"Surface Finish" by R. E. Reason.

NORTH WESTERN REGION

Liverpool Graduate 6.30 p.m. November 2nd
The Lecture Hall, Walker Art Gallery, Liverpool.
Film: "Dispute" followed by a discussion between representatives of Management and Trade Unions.
Joint Meeting with Merseyside Productivity Association.

Manchester Senior and Graduate 7.15 p.m. November 21st
Reynolds Hall, Manchester College of Science and Technology, Sackville Street, Manchester.
"Metal Spraying" by W. E. Ballard, F.R.I.C.

Preston 7.30 p.m. November 8th
The Harris College, Corporation Street, Preston.
"Spark Erosion" by P. J. C. Gough.

Stoke-on-Trent 7.30 p.m. November 23rd
Grand Hotel, Hanley, Stoke-on-Trent.
"Trades Unions and Their Approach to Productivity" by
R. Slater.
Visitors welcome.

SCOTLAND REGION

Edinburgh 7.30 p.m. November 8th
North British Hotel, Princes Street, Edinburgh.
"Flow Turning" by E. J. Bennett.
An invitation is extended to all interested in this subject.

Glasgow 7.00 p.m. November 4th
Dinner-Dance.
Stuart Hotel, East Kilbride.
Tickets 30s.

Glasgow 7.30 p.m. November 16th
The Institute of Engineers and Shipbuilders, 39 Elmbank
Crescent, Glasgow, C.2.
"Chipless Turning" by E. J. Bennett.

Dundee 7.30 p.m. November 1st
Y.M.C.A. Hall, 10 Constitution Road, Dundee.
"Production Engineering Research" by J. C. Holmes,
M.I.Prod.E., Rolls-Royce Ltd., Glasgow.

SOUTH EASTERN REGION

London — Brighton Group 7.00 p.m. November 22nd
A.P.V., Crawley.
"A Review of New Techniques in the Manipulation of
Metals" by G. G. Dewsnap.

London 7.00 p.m. November 9th
The Royal Aeronautical Society, 4 Hamilton Place, London,
W.1.
"Cold Forging" by F. Griffiths.

London Graduate 7.15 p.m. November 8th
10 Chesterfield Street, Mayfair, London, W.1.
"Flow Production of Alarm Clocks" by O. C. Hermann,
Works Manager, Smiths Alarm Clocks Ltd.
Talk supported by a sound film on the production of alarm
clocks at the Smiths Factory.

Luton 7.30 p.m. November 21st
Half-Way House, Dunstable Road, Luton.
"Static Switching Applied to Machine Tool Control" by
W. G. Turner.

DECEMBER 1st - 9th, 1961

EAST AND WEST RIDINGS REGION

Halifax and Huddersfield 7.30 p.m. December 4th
Lecture Theatre, Engineering Tower, Huddersfield Technical
College.
"Work Study" by F. T. Mountford.

Leeds Graduate 10.00 a.m. December 2nd
Works Visit to Lawrence Wilson & Sons Ltd., Silver Cross,
Guiseley, Yorks.
Rendezvous: Main Entrance.
Apply Honorary Secretary.

MIDLANDS REGION

Coventry Graduate 7.30 p.m. December 7th
Courtauld Lecture Theatre, Lockhurst Lane, Coventry.
"Problems Associated with the Export of Machine Tools"
by C. E. Middlemass, General Manager, Associated British
Machine Tool Makers Ltd.

Wolverhampton Graduate 2.15 p.m. December 6th
Works Visit to Lotus Ltd., Stafford.
Rendezvous: St. Georges Parade, Wolverhampton.
Coach transport provided.

NORTH MIDLANDS REGION

Loughborough Colleges 2.30 p.m. December 6th
Works Visit to Wolverhampton Die Casting Co. Ltd.,
Grazeley Hill, Wolverhampton.
Party limited to 20 Students.

Luton Graduate 7.30 p.m. November 14th
Tulip Room, Half-Way House Hotel, Luton Road,
Dunstable.

"Test and Development of an Automobile for Volume
Production" by H. A. Dean, M.I.Mech.E., of Vauxhall
Motors Ltd.
Joint Meeting with The Institution of Mechanical
Engineers, Eastern Graduate Section.

Rochester 7.30 p.m. November 16th
Sun Hotel, Chatham.
"Glass" by J. C. Elphee.

SOUTHERN REGION

Reading 7.30 p.m. November 16th
Great Western Hotel, Station Road, Reading.
"Cost Control for the Production Engineer" by F. G. S.
English, M.I.Prod.E.

Southampton 7.15 p.m. November 16th
The Polygon Hotel, Southampton.
"Production Control-Provisioning Aspects" by H. Horne,
M.I.Prod.E.

SOUTH WESTERN REGION

Western 7.00 p.m. for 7.30 p.m. November 30th
Dinner and Dance.
The Berkeley Cafe.
Tickets: 25s.; Dinner Suits.

Western Graduate 7.30 p.m. November 15th
The Small Lecture Theatre, Faculty of Engineering, Queen's
Building, University of Bristol, University Walk, Bristol.
"Venue Open to Production Engineers" by F. Pitts,
Personnel Manager, Bristol-Siddeley Engines Ltd.
Joint Meeting with The Institution of Mechanical
Engineers.

WALES REGION

Swansea 7.00 p.m. November 13th
The Dragon Hotel, Kingsway, Swansea.
"Every Penny Counts: Purchased Out Cost Reductions"
by G. G. Neill, Girlings Ltd., Birmingham.

Peterborough 7.30 p.m. December 5th
Conference Room, F. Perkins Ltd., Peterscourt, Peter-
borough.
"Non Destructive Testing and Production Engineering" by
J. F. Hinsley, F.I.M.
Joint Meeting with Peterborough Branch of Incorporated
Plant Engineers.

SCOTLAND REGION

Glasgow 7.30 p.m. December 7th
The Institute of Engineers and Shipbuilders, 39 Elmbank
Crescent, Glasgow, C.2.
Open Discussion Night.

SOUTH EASTERN REGION

London 7.00 p.m. December 7th
The Royal Aeronautical Society, 4 Hamilton Place, London,
W.1.
"The Assistance the Production Engineer can obtain from
the Cost and Financial Accountant" by J. F. Hull,
B.Sc.(Eng. Lon.), Grad.I.Prod.E., A.M.B.I.M., A.M.I.Loc.E.
Luton Graduate December 9th
Works Visit to Borg-Warner Ltd, Letchworth, Herts.

SOUTH WESTERN REGION

Western 7.30 p.m. December 6th
The Small Lecture Theatre, University of Bristol, Queens
Walk, Bristol.
"Case Studies in the Application of Work Study", by
G. R. Burn, A.M.I.Prod.E.

Production Appointments

BULLETIN No. 98 NOVEMBER, 1961

The last date for receiving material for insertion in the following month's bulletin is the 20th of each month, and cancellations cannot be accepted after this date. Correspondence should be addressed to: The Publications Department, The Institution of Production Engineers, 10 Chesterfield Street, Mayfair, London, W.1 (Telephone: GROsvenor 5254).

RATES — Run-on, per appointment: £4 4s. 0d. up to 100 words; £1 1s. 0d. for each additional 100 words or part thereof. Special rate for firms affiliated to the Institution, technical colleges and universities: £2 2s. 0d. per appointment up to 100 words, and 10s. 6d. for each additional 100 words or part thereof.

Displayed: £6 per single-column inch (column width 3½ in.). Special rate for firms affiliated to the Institution technical colleges and universities: £5 10s. 0d. per single-column inch.

Agency discount on displayed and run-on advertisements: 10%.

Advertisers are advised that better response is likely if, in addition to essential qualifications, the following information is given:

(a) Location of appointment; (b) Status in the organisation and scope of promotion; (c) Salary range and age range.

Advertisers are asked to advise the Institution when appointments are filled. The Institution reserves the right to refuse or withdraw any announcement and also to make any alteration in the wording to ensure conformity with the Institution standards.

Members interested in the following appointments should make application in accordance with the terms of notice. No correspondence can be undertaken by the Secretary other than the forwarding of replies to Box Nos.

MSL

*have been retained to
advise on this appointment*

CHIEF PRODUCTION EXECUTIVE

for one of the largest works of a major British metal and processing company.

He will be responsible to the General Manager of the works for its entire production. The total works' complement numbers some thousands.

Candidates must have senior managerial experience, and a background in modern steel rolling, or other metal rolling, would be an advantage. A degree or professional qualification in engineering or metallurgy is desirable. Age 35 to 45 years. Salary to be negotiated but not less than £2,500. Pension, life assurance cover and, if necessary, housing assistance. Please send brief details in confidence, quoting reference 9025, to: P. A. Ashworth.

In no circumstances will a candidate's identity be disclosed to our client unless he gives permission after a confidential interview at which he will be given full details of the appointment.

MANAGEMENT SELECTION LIMITED

17 Stratton Street, London, W.1.

Technical Sales Office

If you are an ambitious young engineer with initiative, ability to deal with technical correspondence and some commercial experience seeking a responsible, well-paid position with prospects in a progressive company, you would be well advised to send us, in confidence, full details of your personal history. If our name is familiar you will probably be aware that we handle top-quality Continental machines and recent additions to this range causes us to look for one or two men with the ability to join our existing team of specialist inside sales engineers. Knowledge of multi-unit machines and chucking lathes would be an undoubted asset.

Applications should be sent to:
**The Director and General Manager,
Sykes Machine Tool Co. Ltd.,
Hythe Works, The Hythe,
Staines, Middlesex.**

PRODUCTION SUPERINTENDENT

is required, to be responsible to the Works Manager for the complete organisation, control and development of all Production Departments.

The primary requirement is for a person with several years' experience at Senior Foreman or Superintendent level, or alternatively as Production Engineer in a modern progressive manufacturing organisation. Academic qualifications are an advantage but not essential.

This is an important appointment at a time when the manufacturing facilities are undergoing expansion and re-organisation. The Company is a major unit within an old-established industrial group and is situated West of London. The starting salary will be in the region of £1,500 plus an annual bonus. Pension and Life Assurance Scheme.

Applications in strict confidence to: **BOX NO. 2070, I.PROD.E., 10 CHESTERFIELD STREET, MAYFAIR, LONDON, W.1.**

PRODUCTION MANAGER FIBRE GLASS DIVISION

required for rapidly expanding division of a large organisation. Experienced man to take full control of fibre glass moulded products. Good salary and excellent prospects for energetic man. Experience in hand lay up technique essential.

Write giving details of experience and salary required to:

**BOX W 315,
LEE & NIGHTINGALE,
LIVERPOOL, 2.**

COLLARO LIMITED, BARKING, ESSEX

Work Study Engineers

Two work study engineers are required who have an H.N.C. in mechanical or electrical engineering or the equivalent, to strengthen the work study team.

Experience in flow production techniques would be an advantage with sound basic knowledge of time and method study. Experience of M.T.M. would be an advantage but training would be provided for suitable applicants.

Four-figure salaries are offered with good conditions: non-contributory pension scheme. Apply in writing to: **Personnel Manager**, or send for application form.

INTERNATIONAL LIGHT ENGINEERING COMPANY

requires

YOUNG PRODUCTION ENGINEER

A young Production Engineer, who has already made a promising start into his career, is required by a Company belonging to a world-wide organisation to work in, and ultimately take charge of, the Work Study and Production Control Office in their Leicester factory.

The successful applicant will have practical machine shop experience, and have shown evidence of successful further education since leaving school. He should have some experience of the practice and installation of Work Study Schemes, and/or Production Control Systems, including scheduling and machine loading for batch production of light engineering assemblies.

Prospects in this rapidly expanding organisation will be excellent for a young person, preferably 22-26 years of age, who shows enthusiasm, initiative, and ability to overcome problems without requiring constant supervision.

All applications, which should give full details of experience and salaries earned to date, will be treated in the strictest confidence, and should be addressed to:

THE GENERAL MANAGER, VELAN ENGINEERING CO. LTD., ROSS' WALK, LEICESTER.

LIAISON ENGINEER

Responsible for Technical Supplies

The rapidly expanding business of specialised electronic tube and valve manufacture calls for a large variety of special components and materials, often in un-economical production quantities. A leading manufacturer is posed with the problem of obtaining these supplies against short term delivery at the same time to tight specification.

We are seeking a man, probably aged 30-40, with a dynamic personality to take up a new post to liaise between outside suppliers and production development departments. He would ideally have a good background in light engineering industry, but should also have some knowledge of purchasing problems and sources of supply in the electronic industry.

The position will involve the selected candidate in travel at home and abroad for short periods.

We are prepared to pay a man with the right background and personality £1,400-£1,600 per annum.

Please reply, in confidence, to: **Box No. 2072, IProd.E., 10 Chesterfield Street, Mayfair, London, W.1.**

Production Engineer. Machine tool manufacturers and production consultants engaged in the supply and installation of modern automatic production machines and equipment, require a Production Engineer, aged about 30, for technical liaison and sales. Good opportunity for all-rounder to use his initiative. Essential: practical experience of metal manufactures and most types of machining and presswork. Willingness to travel extensively in United Kingdom, possibly also Continent. Desirable: some knowledge of German or Italian. London base. Salary commensurate with experience, plus car and expenses, offered to successful applicant. Apply: **Box No. 2068, IProd.E., 10 Chesterfield Street, Mayfair, London, W.1.**

Design Engineer is required by expanding Company in Buckinghamshire. The Company has strong marine and aircraft connections and the applicant must have first-class knowledge of marine diesels and aero engines. He must have a strong production bias with adequate practical experience in light engineering and will be fully responsible to the Board for a development programme and insuring that all final designs are suitable for production. The appointment offers a good salary and prospects for an engineer aged 40 to 45, holding A.M.I.Prod.E. or equivalent. **Box No. 2064, IProd.E., 10 Chesterfield Street, Mayfair, London, W.1.**

Production Process Planning Engineer required for new modern factory. Knowledge of general engineering, sheet metal and welded fabrication. Experience of batch production methods, machine and departmental loading essential. Age group 25-35 years. Apply in strict confidence to: Works Manager, Simplex Dairy Equipment Co. Ltd., Sawston, Cambridge.

Engineers. Machine Tool Company require for their London Technical Sales Office keen time-served engineers to work on time studies, production proposals, etc. Men now engaged on planning, production engineering, tooling equipment should have the necessary experience for the positions vacant. Apply, in confidence, stating age, experience and present salary to: **Box No. 2069, IProd.E., 10 Chesterfield Street, Mayfair, London, W.1.**



A DEVELOPMENT ENGINEER

is required to join an expanding Research and Development Department in London. He must have completed an indentured apprenticeship and should understand the whole sphere of production engineering methods and process planning and also have had experience of production planning including machine loading and production control. Preference will be given to a man with drawing office experience in a production engineering factory manufacturing machine tools, cars or aircraft. Age 25 or over.

Apply to:

**The Company Personnel Officer,
THOMAS DE LA RUE & CO. LTD.,
110 Bunhill Row, E.C.1.**

CHIEF DESIGN AND DEVELOPMENT ENGINEER

An expanding Company employing 300 in the design and production of a complete range of industrial spray painting and pneumatic equipment, wishes to appoint a man of wide experience for the above executive function.

Age 33-45 with corporate membership of The Institution of Production or Mechanical Engineers and a successful career in similar positions.

An attractive salary and fringe benefits will be offered to suitable applicant.

Send full particulars of education, training, positions held and salaries earned, to:

**Deputy Managing Director, Alfred Bullows & Sons Ltd.,
Long Street, Walsall, Staffs.**

draughtsmen

SENIORS INTERMEDIATES DETAILERS

for development
and production of
electronics and
small mechanisms

The newly formed Marine Equipment Unit is now expanding and laying down long term programmes to extend its present activities. These offer excellent opportunities to Draughtsmen with practical workshop experience and a working knowledge of specification B.S. 308.

Attractive and progressive salaries will be paid to the selected applicants and there are excellent prospects of advancement.

INTERVIEWS AT ILFORD OR IN CENTRAL LONDON

Please reply, giving full details of your qualifications and experience to :

The Personnel Manager, The Plessey Co. Ltd., Vicarage Lane, Ilford, Essex.

Plessey

Expanding organisation requires several qualified and experienced

PRODUCTION ENGINEERS

to join an established department. The appointments offer wide scope for initiative and experience in Work Study, Job Evaluation, Materials Handling, Plant Layout, Work Incentive Schemes, etc.

Applicants should be within the preferred age range of 25 to 35, have two or three years previous experience in Work Study, and have followed a recognised engineering apprenticeship. Minimum educational requirements—H.N.C. or equivalent.

Commencing salary will be dependent on age, qualifications and previous experience. Salary and promotion prospects will depend on measured performance.

The Company is situated in South Yorkshire and has a reputation for the high quality of its products. We follow a progressive policy in regard to all matters concerning personnel, training, and welfare.

Applications will be treated in the strictest confidence and should be forwarded to: **BOX NO. 2071, LPRODE., 10 CHESTERFIELD STREET, MAYFAIR, LONDON, W.1**, quoting ref: PE/8/5, marking envelopes "Private and Confidential".

Estimator and Ratefixer required by expanding engineering firm in modern works. Must be fully experienced on estimating and stop watch ratefixing. Apply, in strict confidence to: Works Manager, Simplex Dairy Equipment Co. Ltd., Sawston, Cambridge.



**BROOKHIRST
IGRANIC Ltd.**

Member of the Metal Industries Group

CHIEF PRODUCTION ENGINEER

Brookhirst Igranite Limited, one of the leading firms in the electrical control gear field, wishes to appoint a Chief Production Engineer at its Bedford factory. This is a senior appointment and the successful applicant will be responsible to the Works Manager for pre-production planning, tool design, tool making, rate fixing, work study and maintenance of the plant and buildings.

Applicants between the ages of 35 - 45 should be corporate members of The Institution of Production Engineers, or have equivalent qualifications. They should have a good knowledge of all machining processes, including sheet metal work, and be familiar with electrical assemblies and wiring. The salary for this appointment will be dependent on the qualifications and experience of the person appointed.

Applications, in the first instance, should be addressed to :

**The Group Personnel Officer,
Metal Industries Limited,
Brook House, Park Lane,
London, W.1.**

HARVEY

SENIOR PRODUCTION ENGINEER

required for

STEEL FURNITURE DIVISION

to improve and co-ordinate production methods, layout and allied aspects in this line of manufacture. Essential qualifications will include an indentured apprenticeship, preferably accompanied by membership of a professional institution, and a wide practical experience in the manufacture of sheet metal products, either in steel furniture or a similar branch of this field. An additional aspect of this appointment will be the leading of a well-established Work Study section, and experience in this direction will also be required.

The appointment carries an attractive salary which will be commensurate with qualifications, experience and responsibility entailed. Family accommodation can be offered to a married man after a probationary period. Age range 30 to 45.

Apply giving full relevant details, and marking the envelope Reference PE/W/33, to:

The Personnel Manager,
G. A. Harvey & Co. (London) Ltd.,
Woolwich Road, Charlton,
London, S.E.7.



WORKINGTON IRON & STEEL COMPANY

Branch of The United Steel Companies Limited

MANAGER—CENTRAL ENGINEERING

WORKSHOPS

Applications are invited for the senior position of Manager of the Central Engineering Workshops in the Engineering Division. He will have a staff of engineers, foremen, planners and draughtsmen and will be a mechanical engineer with managerial experience in a company making medium or heavy engineering products and using modern production planning methods.

A single building houses the workshops (employing 300 men engaged in all general engineering trades) for overhauling and reconditioning iron and steelworks plant and equipment including scheduled maintenance of locomotives and cranes; special items of plant are made one-off or in small batches in the department.

The salary will be substantial. The Company has a compulsory pension and life assurance scheme and offers a house or arrangements for assisted house purchase.

Apply (in strict confidence) without delay, stating age, education, training and qualifications, together with details of previous appointments indicating their scope and degree of responsibility, to the: Secretary, Workington Iron & Steel Company (Branch of The United Steel Companies Ltd.), P.O. Box 5, Workington, Cumberland. Endorse envelope "Personal".

EDUCATIONAL ANNOUNCEMENTS & APPOINTMENTS

COUNTY OF ESSEX EDUCATION COMMITTEE BRAINTREE COLLEGE OF FURTHER EDUCATION Church Lane, Braintree.

Principal:

H. E. Hammond, B.Sc.(Eng.), M.I.Mech.E., A.M.I.Prod.E.

BLOCK RELEASE COURSE IN FOUNDRY PRACTICE

Applications are invited for admission to a Block Release Course in FOUNDRY PRACTICE AND TECHNOLOGY leading to the Ordinary and Advanced level certificates of the City and Guilds of London Institute. The course will be of two years' duration and students will attend full-time for three periods of five weeks each year.

There will be excellent facilities at the College; a new foundry is being erected and equipped for the course.

Students requiring accommodation in the area will be placed in approved lodgings at a reasonable charge.

Full particulars may be obtained on application to the Principal.

LOUGHBOROUGH COLLEGE OF TECHNOLOGY Leicestershire.

RESIDENTIAL COURSE IN WORK STUDY AND ALLIED MANAGEMENT TECHNIQUES

The programme of courses arranged for 1962 commences on 8th January, and includes the following subjects:

Method Study and Work Measurement	5 weeks
Work Study for Office and Sales Functions	2 weeks
Production Planning and Control	2 weeks
Statistical Methods for Work Study Engineers	3 weeks
Work Study and Ergonomics	2 weeks
Office Organisation and Methods and Digital Computer Applications	2 weeks

The College possesses excellent amenities and facilities including residential halls and extensive production workshops. Tuition fees: £10 per week. Residence in Hall £8 8s. per week.

Full particulars and enrolment forms can be obtained from the: Head of the Department of Industrial Engineering and Management.

East Ham Technical College—Engineering Department.

Applications are invited for the post of: Assistant Grade "B" to teach Machine Shop Engineering and allied subjects. Applicants should be suitably qualified and have adequate practical experience and preferably some teaching experience. Burnham scale (London area) (at present under review) Salary £700 × £27 10s. (15) × £37 10s. (1) to £1,150, plus London Allowance of £38 or £51 as appropriate. Qualifications, training and industrial experience will be taken into consideration in the assessment of salary. Application forms (returnable, 17th November, 1961) and further particulars from: Chief Education Officer, Education Office, Town Hall Annexe, Barking Road, East Ham, E.6.

University of Birmingham, Department of Engineering Production.

Lecturer in Engineering Production for M.Sc. Applications are invited for appointment as Lecturer in Engineering Production for M.Sc. course work in production control, factory planning or work study. Salary scale: £1,050 × £50 - £1,400 × £75 - £1,550: £1,500 × £75 - £1,850 plus F.S.S.U., and family allowance benefits. Applications (three copies), naming three referees and giving details of qualifications and experience, should reach the Deputy Registrar, The University, Birmingham, 15, as soon as possible.

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